

**IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF TEXAS  
TYLER DIVISION**

**EQUISTAR CHEMICALS, LP, *et al.***

**vs.**

**WESTLAKE CHEMICAL  
CORPORATION**

§  
§  
§  
§  
§  
§  
§

**CIVIL ACTION NO. 6:14CV68**

**MEMORANDUM OPINION AND ORDER**

Before the Court is Plaintiffs’ Renewed Motion for Judgment as a Matter of Law of Infringement or in the Alternative for a New Trial (ECF 224) and Defendant’s Motion for Judgment as a Matter of Law Pursuant to Federal Rule of Civil Procedure 50(b) (ECF 226). For the reasons set forth below, the motions are **DENIED**.

**BACKGROUND**

The Court held a jury trial in this case. The jury returned a unanimous verdict on March 11, 2016 that Plaintiffs did not prove by a preponderance of the evidence that Westlake Chemical Corporation (“Westlake”) literally infringes claims 1, 2, 9, or 10 of United States Patent No. 7,064,163 (the “ ‘163 patent”). The jury also found that Westlake did not prove that any of the asserted claims of the ‘163 patent are invalid.

The asserted patent, entitled “Polyolefin-based Adhesive Resins and Methods of Making Adhesive Resins,” relates to a method of making polyolefin-based adhesive resins used for bonding to or bonding together polyolefins and polar materials. ‘163 patent, col. 1:16–19. The ‘163 patent discloses a process to make adhesive resins by mixing an un-pelletized polyolefin with a graft polymer in a heated mixing device.

In their motion for judgment as a matter of law, Plaintiffs assert that Defendant infringes and that there was insufficient evidence for any reasonable jury to find that Defendant manufactures its accused adhesive resins in a non-infringing manner. Alternatively, Plaintiffs seek a new trial on infringement and damages because the great weight of the evidence is in Plaintiffs' favor. Defendant argues that it is entitled to a judgment as a matter of law that the asserted claims of the '163 patent are invalid.

### **APPLICABLE LAW**

Judgment as a matter of law is only appropriate when “a reasonable jury would not have a legally sufficient evidentiary basis to find for the party on that issue.” FED. R. CIV. P. 50(a). Upon a party's renewed motion for judgment as a matter of law following a jury verdict, the Court asks whether “the state of proof is such that reasonable and impartial minds could reach the conclusion the jury expressed in its verdict.” FED. R. CIV. P. 50(b); *American Home Assur. Co. v. United Space Alliance, LLC*, 378 F.3d 482, 487 (5<sup>th</sup> Cir. 2004). “The grant or denial of a motion for judgment as a matter of law is a procedural issue not unique to patent law, reviewed under the law of the regional circuit in which the appeal from the district court would usually lie.” *Finisar Corp. v. DirectTV Group, Inc.*, 523 F.3d 1323, 1332 (Fed. Cir. 2008). “A JMOL may only be granted when, ‘viewing the evidence in the light most favorable to the verdict, the evidence points so strongly and overwhelmingly in favor of one party that the court believes that reasonable jurors could not arrive at any contrary conclusion.’ ” *Versata Software, Inc. v. SAP America, Inc.*, 717 F.3d 1255, 1261 (Fed. Cir. 2013) (quoting *Dresser-Rand Co. v. Virtual Automation, Inc.*, 361 F.3d 831, 838 (5<sup>th</sup> Cir. 2004)).

Pursuant to this Court's regional circuit, a court is to be “especially deferential” to a jury's verdict, and must not reverse the jury's findings unless they are not supported by substantial evidence. *Baisden v. I'm Ready Productions, Inc.*, 693 F.3d 491, 499 (5<sup>th</sup> Cir. 2012). “Substantial

evidence is defined as evidence of such quality and weight that reasonable and fair-minded men in the exercise of impartial judgment might reach different conclusions.” *Threlkeld v. Total Petroleum, Inc.*, 211 F.3d 887, 891 (5<sup>th</sup> Cir. 2000). A motion for judgment as a matter of law must be denied “unless the facts and inferences point so strongly and overwhelmingly in the movant’s favor that reasonable jurors could not reach a contrary conclusion.” *Baisden*, 393 F.3d at 498 (citation omitted). However, “[t]here must be more than a mere scintilla of evidence in the record to prevent judgment as a matter of law in favor of the movant.” *Arismendez v. Nightingale Home Health Care, Inc.*, 493 F.3d 602, 606 (5<sup>th</sup> Cir. 2007).

In evaluating a motion for judgment as a matter of law, a court must “draw all reasonable inferences in the light most favorable to the verdict and cannot substitute other inferences that [the court] might regard as more reasonable.” *E.E.O.C. v. Boh Brothers Construction Co., L.L.C.*, 731 F.3d 444, 451 (5<sup>th</sup> Cir. 2013) (citation omitted). However, “[c]redibility determinations, the weighing of the evidence, and the drawing of legitimate inferences from the facts are jury functions, not those of a judge.” *Reeves v. Sanderson Plumbing Products, Inc.*, 530 U.S. 133, 150, 120 S.Ct. 2097 (2000).

## ANALYSIS

### **A. Plaintiffs’ Motion for Judgment of Infringement**

To prove infringement under 35 U.S.C. § 271, a plaintiff must show the presence of every element, or its equivalent, in the accused product or service. *Lemelson v. United States*, 752 F.2d 1538, 1551 (Fed. Cir. 1985). First, a claim must be construed to determine its scope and meaning; and second, the construed claim must be compared to the accused device or service. *Absolute Software, Inc. v. Stealth Signal, Inc.*, 659 F.3d 1121, 1129 (Fed. Cir. 2011) (citing *Carroll Touch, Inc. v. Electro Mechanical Systems, Inc.*, 15 F.3d 1573, 1576 (Fed. Cir. 1993)). “A determination

of infringement is a question of fact that is reviewed for substantial evidence when tried to a jury.” *ACCO Brands, Inc. v. ABA Locks Manufacturer Co., Ltd.*, 501 F.3d 1307, 1311 (Fed. Cir. 2007).

Plaintiffs argue that Defendant’s process for making Tymax includes each step of the asserted claims. Plaintiffs assert that Defendant’s non-infringement expert, Dr. Rauwendaal, admitted that Defendant’s process includes each step of the asserted claims except for one—“mixing, . . . while minimizing cross-linking.” Plaintiffs submit that the evidence at trial showed that Defendant’s process minimizes cross-linking. More specifically, Plaintiffs contend that their expert witness, Dr. Mirabella, testified that Defendant uses an in-line process and also uses nitrogen purges that minimize cross-linking in the production of Defendant’s adhesive resins. As a result, Plaintiffs argue that there was insufficient evidence from which any reasonable jury could conclude that Plaintiffs failed to meet their burden of demonstrating that Defendant’s process infringes the asserted claims of the ‘163 patent. Plaintiffs further submit that a new trial is appropriate because the great weight of the evidence shows infringement.

Defendant responds that it produced overwhelming evidence at trial that its process does not minimize cross-linking. Instead, its process promotes cross-linking through extensive heat history and the introduction of oxygen. Rather than minimize cross-linking, Defendant’s process removes the cross-linked material at the end of the process with a heavy duty screen pack. Defendant asserts that the jury was presented evidence that Plaintiffs’ expert, Dr. Mirabella, did not sample Defendant’s products even though he testified that a comparison to the conventional process would be needed to determine whether the process minimizes cross-linking.

Defendant’s expert witness, Dr. Rauwendaal, testified that Defendant’s process uses an extensive heat history, meaning that Defendant exposes its product to a higher temperature for a

longer duration, and also introduces oxygen to the process.<sup>1</sup> He further testified that both of these events cause cross-linking. Defendant further provided the jury with evidence that rather than minimizing cross-linking in its process, its process provides for the removal of cross-linking after it occurs through the use of a screen pack.<sup>2</sup> The screen pack is two steps removed from the mixer where mixing occurs in Defendant's process.<sup>3</sup>

Plaintiffs challenged Dr. Rauwendaal's testimony that Defendant's process uses an extensive heat history. Plaintiffs submit that Dr. Rauwendaal relied on production data from a date on which temperatures were higher than normal during the process. Plaintiffs extensively explored this issue throughout the trial and argued to the jury that the production data relied upon by Dr. Rauwendaal was not representative. Ultimately, the jury considered the credibility of the witnesses and determined the facts. These credibility determinations and weighing of the evidence to make fact findings are precisely the function of the jury. *Reeves*, 530 U.S. at 150.

The Court provided the jury with its construction of the phrase "while minimizing cross-linking, ... following polymerization without first pelletizing the pelletizable polyolefin," which was to apply its plain and ordinary meaning.<sup>4</sup> Here, the jury was properly instructed on the law regarding infringement and was free to judge the credibility of the witnesses and weigh all of the competing evidence. After consideration of the evidence presented at trial, including Defendant's evidence that its process does not minimize cross-linking, the jury determined that Defendant did not infringe the patent-in-suit. Drawing all reasonable inferences in the light most favorable to the verdict, the evidence in this case does not point overwhelmingly in favor of Plaintiffs, such that reasonable jurors could not have reached the conclusion that was reached in this case. *Versata*

---

<sup>1</sup> See Trial Transcript, ECF 214, at \*132 (transcript p. 1108).

<sup>2</sup> See Trial Transcript, ECF 213, at \*98–99 (transcript p. 899–900).

<sup>3</sup> *Id.*

<sup>4</sup> See Final Jury Instructions, ECF 200, at \*7.

*Software, Inc.*, 717 F.3d at 1261. The jury, acting under a preponderance of the evidence standard as to this disputed factual issue, unanimously reached a reasoned and supportable decision. Accordingly, Plaintiffs’ motion for judgment of infringement as a matter of law or, alternatively, for a new trial is **DENIED** in all respects.

### **B. Defendant’s Motion for Judgment of Invalidity**

An issued patent is presumed valid. 35 U.S.C. § 282; *Fox Group, Inc. v. Cree, Inc.*, 700 F.3d 1300, 1304 (Fed. Cir. 2012). Defendant has the burden to show by clear and convincing evidence that the asserted claims were anticipated by or obvious over the prior art. *Microsoft Corp. v. i4i Ltd. Partnership*, 564 U.S. 91, 131 S.Ct. 2238, 2242 (2011). To prevail on a judgment as a matter of law, moreover, Defendant must show that no reasonable jury would have a legally sufficient evidentiary basis to find for Plaintiffs. FED. R. CIV. P. 50.

A patented claim is invalid as anticipated if “(1) the claimed invention was patented, described in a printed publication, or in public use, on sale or otherwise available to the public before the effective filing date of the claimed invention; or (2) the claimed invention was described in a patent issued . . . or in an application for patent published or deemed published . . . , in which the patent or application, as the case may be, names another inventor and was effectively filed before the effective filing date of the claimed invention.” 35 U.S.C. § 102(a). Anticipation requires the presence in the prior art of each and every limitation of the claimed invention. *Amgen, Inc. v. Hoffman-La Roche Ltd.*, 580 F.3d 1340, 1366 (Fed. Cir. 2009).

Obviousness is a question of law based on underlying findings of fact. *In re Kubin*, 561 F.3d 1351, 1355 (Fed. Cir. 2009). Obviousness is based on several factual inquiries: “(1) the scope and content of the prior art; (2) the differences between the prior art and the claims at issue; (3) the level of ordinary skill in the art at the time the invention was made; and (4) objective evidence of nonobviousness, if any.” *Id.* “Generally, a party seeking to invalidate a patent as obvious must

demonstrate by clear and convincing evidence that a skilled artisan would have had reason to combine the teaching of the prior art references to achieve the claimed invention, and that the skilled artisan would have had a reasonable expectation of success from doing so.” *In re Cyclobenzaprine Hydrochloride*, 676 F.3d 1063 (Fed. Cir. 2012) (internal quotations omitted).

Defendant argues that the ‘163 patent’s process is, at best, a minimal advance over the prior art, such that it is not a patentable advance. Defendant asserts that the asserted claims of the ‘163 patent are invalid as anticipated by Hughes and that their invalidity expert, Dr. Steinkamp, testified that every part of independent claim 1 and the asserted dependent claims are present in Hughes. Additionally, Defendant argues that the asserted claims of the ‘163 patent are invalid as obvious in light of Hughes and Vandevijver. Defendant asserts that Plaintiffs failed to establish a nexus between their commercial success following the implementation of the patented process and the claimed invention. Defendant additionally re-asserts its pretrial summary judgment arguments that Dr. Mirabella’s testimony should have been excluded and that the ‘163 patent is invalid based on the on-sale bar. Finally, Defendant submits that the Court should have adopted its proposed claim construction for “minimizing cross-linking,” “without first pelletizing the pelletizable polyolefin,” and “improved.”

Defendant’s arguments for invalidity were previously considered and rejected by the Court on summary judgment motions. Defendant does not raise any new arguments. At trial, Plaintiffs’ expert witness, Dr. Mirabella, testified that Hughes does not include the limitations of “minimizing cross-linking” and mixing “following polymerization.”<sup>5</sup> Dr. Mirabella opined that Hughes discloses reducing cross-linking with a graft and not in an adhesive resin layer as in the patent-in-suit.<sup>6</sup> The evidence at trial was sufficient to support the jury’s conclusion that Defendant did not

---

<sup>5</sup> See Trial Transcript, ECF 217, at \*13 (transcript p. 1336); Trial Transcript, ECF 217, at \*16 (transcript p. 1339).

<sup>6</sup> See Trial Transcript, ECF 216, at \*7 (transcript p. 1280); Trial Transcript, ECF 217, at \*14 (transcript p. 1337).

meet its burden of proving by clear and convincing evidence that the patent-in-suit is invalid as anticipated by Hughes.

Similarly, Plaintiffs presented evidence at trial to support the jury's conclusion that the patent-in-suit is not invalid as obvious. The inventor of the patent-in-suit, Dr. Shida, provided testimony opining that it would not have been obvious to a person of skill in the art to introduce graft polymer into a continuous manufacturing process as disclosed in the '163 patent because there were concerns about putting graft into that type of commercial system.<sup>7</sup> Dr. Mirabella and Dr. Pucci further offered testimony as to the nonobvious nature of the introduction of graft rather than traditional additives.<sup>8</sup>

Establishing invalidity by anticipation requires that Defendant prove by clear and convincing evidence that each element of the challenged claims is present in the prior art systems. *Zenith Electronics Corp. v. PDI Communication Systems, Inc.*, 522 F.3d 1348, 1363 (Fed. Cir. 2008). As previously stated, the evidence at trial included testimony from Plaintiffs' expert witness that Hughes does not disclose the limitations of "minimizing cross-linking" and mixing "following polymerization." With regard to Defendant's argument that a skilled artisan would have had reason to combine the teachings of the prior art references to achieve the claimed invention, thereby rendering it obvious, Dr. Mirabella additionally testified that Vandevijver is fundamentally different than the patent-in-suit because it concerns methods for producing graft polymers and not adhesive resins.<sup>9</sup> Vandevijver does not, for example, refer to minimizing cross-linking in the context of the production an adhesive resin.<sup>10</sup>

---

<sup>7</sup> See Trial Transcript, ECF 208, at \*249 (transcript p. 249).

<sup>8</sup> See Trial Transcript, ECF 209, at \*261–64 (transcript p. 540–43); Trial Transcript, ECF 208, at \*198 (transcript p. 198).

<sup>9</sup> See Trial Transcript, ECF 217, at \*33 (transcript p. 1356).

<sup>10</sup> *Id.*



These witnesses provided evidence relevant to the jury's validity decision. Defendant cross-examined these witnesses and produced their witnesses opining that the '163 patent is invalid. The jury heard all of the testimony relevant to whether the asserted claims are anticipated or obvious, weighed it, and determined that the asserted claims are not invalid.

The evidence here does not establish that no reasonable jury would have a legally sufficient basis to find the '163 patent valid. *See* FED. R. CIV. P. 50. The evidence at trial was sufficient for a reasonable juror to find that Defendant did not meet its burden of proof. Accordingly, Defendant's motion for judgment of invalidity should be **DENIED**. Defendant's motion does not present any new arguments showing that the Court's prior decisions on claim construction, denying the motion to exclude Dr. Mirabella and granting Plaintiffs' motion for summary judgment of no on-sale bar should be reconsidered.

### **CONCLUSION**

For the reasons set forth above, the jury's verdicts of non-infringement and no invalidity should stand. The jury's verdict is supported, in both instances, by adequate evidence presented at trial, and it should not be disturbed. Accordingly, Plaintiffs' Renewed Motion for Judgment as a Matter of Law of Infringement or in the Alternative for a New Trial (ECF 224) and Defendant's Motion for Judgment as a Matter of Law Pursuant to Federal Rule of Civil Procedure 50(b) (ECF 226) are **DENIED**.

**So ORDERED and SIGNED this**

**Dec 29, 2016**

  
K. NICOLE MITCHELL  
UNITED STATES MAGISTRATE JUDGE